



PATENT  
454310-2430

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Paoletti et al.  
Serial No. : 07/881,995  
Filed : May 4, 1992  
For : MODIFIED VACCINA VIRUS AND METHODS FOR MAKING  
AND USING THE SAME  
Group Art Unit : 1806

530 Fifth Avenue  
New York, New York 10036

I hereby certify that this correspondence  
is being deposited with the United States  
Postal Service as first class mail in an  
envelope addressed to:  
Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231, on 13 Aug 92

Thomas J. Kowalski, Reg. No. 32,147  
Name of Applicant, Assignee or Registered  
Representative

Thomas J. Kowalski  
Signature

13 Aug 92  
Date of Signature

RECEIVED

AUG 26 1992

GROUP 1800

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§ 1.97 AND 1.98

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Pursuant to the duty of disclosure under 37 C.F.R.  
§§1.56, 1.97 and 1.98, Applicants call the Examiner's attention  
to the fact that this application is a divisional application of  
Serial No. 07/537,882, filed June 14, 1990, now U.S. Pat. No.  
5,110,587, granted May 5, 1992, which is a continuation  
application of Serial No. 07/090,209, filed August 27, 1987, now

abandoned, which is a divisional application of Serial No. 06/622,135, filed June 19, 1984, now U.S. Patent No. 4,722,848, granted February 2, 1988, which is a continuation-in-part application of Serial No. 06/446,824, filed December 8, 1982, now U.S. Patent No. 4,603,112, granted July 29, 1986, which is a continuation-in-part application of Serial No. 06/334,456, filed December 24, 1981, now U.S. Patent No. 4,769,330, granted September 6, 1988. A copy of each of the issued patents in the lineage of this application are enclosed.

The Examiner's attention is also directed to the following documents which were cited and forwarded to the U.S. Patent and Trademark Office in the above-mentioned predecessor applications, and which are listed on the accompanying form PTO 1449, enclosed in duplicate. Since a copy of each of the following documents was forwarded to the Patent and Trademark Office already, additional copies do not accompany this Information Disclosure Statement.

1. Baxby, Progr. Med. Virol. **19** (1975) 215-246.
2. Bolivar et al., Gene **2**, 95-113 (1977).
3. Bossart et al., Chem. Abstr. **89** (1978) 56,251 n.
4. Campione-Piccardo et al., J. Virol. **31**, 281-287 (1979).
5. Chem. Abstracts, 10th Coll. Index, (1977-1981), vols. 86-95, Virus, Animal, Vaccinia Virus.
6. Colbere-Garapin, Prod. Natl. Acad. Sci. USA **76**, 3755-3759 (1979).

7. Comparative Diagnosis of Viral Diseases, vol. III, Ch. 6, p. 277, Academic Press, New York, 1981.
8. Comprehensive Virology, Fraenkel-Conrad et al., vol. 3, Ch. 5, pp. 405, 427, Plenum Press, New York.
9. Downie et al., Ann. Rev. Microbiol. 10 (1959) 237-252.
10. Ensinger et al., "Marker Rescue etc.", J. Virol. 48(2); 1983, 419-428.
11. Fenner, Virology 8 (1959) 499-507.
12. Fenner, Virology 5 (1958) 502-529.
13. Graham et al., Virology 52, 456-467 (1973).
14. Hamer et al., Nature 281, 35-40 (1979).
15. Joklik, Bacteriological Reviews 30 (1966) 33-66.
16. Jones et al., "Mapping of the Vaccinia Virus etc.", J. Virol. 49(1); 1984, 72-77.
17. Katz et al., C.A. 89 #39241s, (1978) of J. Antimicrob. Chemother. 1978 4(2): 159-162, Genetic Recombination Between Temperature Sensitive Mutant and IBT Resistant Mutant of Vaccinia Virus.
18. Kruczek-Juszczuk C.A. 92#126795f, (1980) of Ann. Univ. Mariae Curie Sect. C, 1978, 33: 1-8, Interferon Induction by Viral Nucleic Acids in Chick Embryo Fibroblasts.
19. Mackett et al., J. Gen. Virol. 45 (1979) 683-701.
20. Mackett et al., "Vaccinia Virus etc.", Proc. Nat'l. Acad. Sci. USA 79, 1982, 7415-7419.
21. Miller et al., J. Gen. Virol. 38 (1977) 135-147.
22. Mocarski et al.: Cell 22, 243 (1980).
23. Morse et al.: J. Virol. 26, 389 (1978).
24. Moss et al-J. of Virology, vol. 40, No. 2, Nov. 1981, pp. 387-389, & 393-395.
25. Moss et al-Chem. Abst. vol. 95 (1981) p.217, 559k.

26. Nakano et al., "Molecular Genetics of Vaccinia etc.", Proc. Nat'l. Acad. Sci. USA **79**, 1982, 1593-1596.
27. Nippon Zoki Pharm. C.A. 94 #7711g, (1981) of Jpn. Kokai Tokkyo Koho 8087724, 2 Jul. 1980, Selective Immune Enhancer.
28. Panicali et al., J. Virol. **37**, 1000-1010 (1981).
29. Panicali et al., "Construction of Live Vaccines etc.", Proc. Nat'l. Acad. Sci. USA **80**, 1983, 5364-5368.
30. Panicali et al., "Construction of Poxviruses etc.", Proc. Nat'l. Acad. Sci. USA **79**, 1982, 4927-4931.
31. Panicali et al., C.A. 94 #135967g, 1981 of J. Virol., 1981, 37(3): 1000-10, Two Major DNA Variants Present in Serially Propagated Stocks of the WR Strain of Vaccinia Virus.
32. Paoletti et al., Jan. 1984, PNAS **81**:193-197.
33. Post et al., Cell **25** (1981) 227-2333.
34. Sam et al., Ann. Virol. **132** E. 135-150 (1981).
35. Sarver et al., Moc. Cell. Biol. **1**, 486-496 (1981).
36. Schuemperli et al.-Chem. Abst. vol. **92** (1980) p.124, 733k.
37. Shigeru et al., C.A. 86., #3119g, 1977 of Yakugaku Zasshi (1976)96(10): 1247-1254, Protein Inhibitors of Gastric Acid Secretion Isolated From Vaccinia Virus-Infected Tissues.
38. Shigeru, C.A. 88., #55061t, 1978 of Japan Kokai 77116402, 29 Sep. 1977, Gastric Juice Secretion-Inhibiting Protein From Vaccinia Virus Infected Animal Tissues.
39. Shimotohno et al., Cell **26**, 66-77 (1981).
40. Smiley, Nature **285** (1980) 333-335.
41. Smith. G.L. et al., Dec. 1983 PNAS **80**:7155-59.
42. Smith. G.C. et al., 7 Apr. 1983, Nature **302**; 490-495.

43. Sveda et al., Proc. Natl. Acad. Sci. USA **78**, 5488-5492 (1981).
44. Third Povirus-Iridovirus Workshop, Sep. 15-18, 1980, Workshop Program.
45. Villarreal et al., Science **196**, 183-185 (1977).
46. Virology, Dulbecco et al., Ch. **56**, pp. 1079 and 1082-1085, Harper & Row, Hagerstown.
47. Weir et al., "Mapping of the Vaccinia Virus etc.", Proc. Nat'l. Acad. Sci. USA **79**, 1982, 1210-1214.
48. Wigler et al., Cell **11**, 223-232 (1977).
49. Wigler et al., Proc. Natl. Acad. Sci. USA **76**, 1373-1376 (1979).
50. Williams, N., 1 Dec. 1983, Nature **306**:427.
51. Wittek et al., J. Virol. **23** (1977) 669-678.
52. Woodroofe et al., Virology **16** (1962) 334-341.
53. Woodroofe et al., Virology **12** (1960) 272-282.

\* \* \*

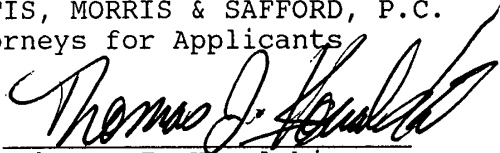
This Information Disclosure Statement is not a representation that the documents cited herein are considered most pertinent, or that a search has been undertaken, or that any of the cited documents are indeed prior art. The Examiner is invited to undertake an independent search. Applicants assert that the claimed invention is patentable over these documents.

Applicants respectfully request that the Examiner consider and make of record the documents cited herein and that a copy of PTO 1449 appropriately initialed by the Examiner be returned to Applicants' attorney.

Respectfully submitted,

CURTIS, MORRIS & SAFFORD, P.C.  
Attorneys for Applicants

By:



Thomas J. Kowalski  
Reg. No. 32,147  
(212) 840-3333